



ARIZONA POPULATION STATISTICS POLICIES

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SUBJECT		REVISION	EFFECTIVE DATE
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A. PURPOSE

To provide documentation which describes the development of the percent of units never built in the Housing Unit Method (HUM) when building permits are used

B. AUTHORITY

A.R.S § 41-1954 A14, A15

C. PERCENT NEVER BUILT CALCULATION

The Arizona Housing Unit Method uses either building permits issued or building permit completions as one of the inputs. When using building permits issued as an input the assumption is that a small percent will never be finalized. Prior to the Census 2000, we assumed that percent to be 2% which was a national average used by Demographers in the early 90's. We at DES now have to use building permits issued as an input again, but instead of using the 2% national average, we decided to calculate an independent never built for each jurisdiction. The following steps were taken:

1. A difference between the 1990 Census and the 2000 Census was calculated and named Census Growth - (CG)
2. The number of building permits issued from 7/1/90 to 7/1/99 was calculated by using the 7/1/99 housing stock minus the 1990 census housing stock - (99HS)
3. Three quarter data of the 7/1/00 estimates was added to the 99HS to calculate the inventory as 4/1/00.
4. The DES housing inventory in 4/1/00 was yr-round as opposed to a total inventory. The yr-round inventory was calculated by applying a yr-round ratio (RATIO) to the total inventory. The ratio was calculated by dividing the number of vacant units that were not either for sale or rent by the total units. The resulting yr-round vacancy rate is looked at as a true representation of what is happening on the ground. In reality, there are no differences between the yr-round and the total inventory approach as both yield the same or near identical results - (4100YR)
5. The number of yr-round permits issued from 7/1/90 to 4/1/00 was calculated by subtracting from the 4100YR the 7/1/90 inventory – (YRPERT)
6. To convert back to total units, the following formula was used:

$$\text{YRPERT} * (1 + \text{RATIO}) = \text{Total Units}$$

7. The number of units never built was calculated by subtracting from the Total Units the CG – UNB

8. The percent never built was calculated by dividing UNB by Total Units - UNBTU
9. The actual percent never built was not used all the time. The following scale was used instead:

UNBTU < 0 = 0%, all the units were assumed completed

UNBTU Between 0% and 2% = Actual UNBTU

UNBTU > 2% = 2%, the two percent is a national average used by DES in the early 1990's